



NATIONAL INSTITUTE OF TECHNOLOGY SIKKIM

INVITATION OF TENDERS/BIDS

Ravangla Campus, Barfung, South Sikkim 77139

www.nitsikkim.ac.in/

Tender No: 52/Academic/Computer-Centre/2017/Tender-01 Date: 20/03/2017

SUPPLY & INSTALLATION OF DESKTOP, LAN SETUP AND OTHER ITEMS AT NIT SIKKIM FOR COMPUTER CENTRE

TENDER SUMMARY			
Bid System	Two Bid Open Tender		
Closing Date & Time for submission of bid	5 th May, 2017, 5:00PM		
Opening Date & Time of technical bid (TENTATIVE)	12 th May, 2017, 11:30 AM (Opening Date & Time of price bid will be informed later <i>only to Technically qualified bidders.</i>)		
Place of opening of bid	ICT Room, National Institute of Technology Sikkim, Ravangla Campus, Barfung, South Sikkim, 737139		
Bid should be addressed to	FIICTI, National Institute of Technology Sikkim Ravangla Campus, Barfung Block, South Sikkim 737139.		
Tender Fees	Rs. 1000/- (Rupees One Thousand, in the form of a Demand Draft drawn in favour of "DIRECTOR, NIT Sikkim" payable at Ravangla, South Sikkim)		
Earnest Money Deposit (EMD)	Sl. No.	Item	EMD Value (₹)
	1	Desktops	₹ 2,00,000/-
	2	Online UPS (50KVA)	₹ 4000/-
	3	LAN Setup	₹ 2000/-
The EMD as mention in the above table should be made in the form of a Demand Draft drawn in favour of "DIRECTOR, NIT Sikkim" payable at Ravangla, South Sikkim, and valid for a period of 45 days beyond the final bid validity period.			

National Institute of Technology (NIT) Sikkim, Ravangla, South Sikkim invites sealed tenders from reputed manufacturers or their authorized Indian Agents/representatives, on the terms and conditions as per tender document, for procurement of following item(s):

Sl. No.	Brief description of Items	Quantity	Installation required, if any	Place of Delivery
1	Desktop (CPU+ Monitor + Keyboard + Mouse, detailed specification is attached as Annexure-A)	100 Set	Yes	NIT Sikkim
2	Online UPS (50KVA) (Annexure-B)	1	Yes	
3	LAN Setup (Annexure-C)	NA	Yes	

The bidders are requested to read the tender document carefully and ensure compliance with all specifications/ instructions herein. Noncompliance with specifications/ instructions in this document may disqualify the bidders from the tender process.

The Institute reserves the right to accept or reject any quotations or to select the item or to reject the bidding process or any quotation wholly or partly without assigning any reason. Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored and rejected.

Instructions to Bidders

1. The respective EMD as per items mentioned above and Tender fee should be enclosed in the form of A/C payee DD in favours of “**Director, NIT Sikkim**” payable at Ravangla. If the successful bidder fails to supply the goods/equipments within stipulated time, then the EMD may be forfeited. **A bidder may participate fully or partially** (accordingly total EMD amount have to be enclosed in the form of single or multiple DDs).
2. The EMD, technical and financial bids should be sent separately and put in different sealed envelopes marked “**EMD**”, “**Technical bid**” and “**Financial bid**” as applicable **for each group of items** and are to be put in separate envelopes, which should be properly sealed. The bid should include the cost of main equipment/item and its accessories (if any). If there is any separate cost for installation, warranty extension etc. that should be quoted. **The bidder should also mention the make and model number of the items.**
3. All the sealed quotations shall be submitted in a sealed envelope duly marked “Tender reference no: “Tender No: 52/NITS /Academics/Computer Center/2017/Tender-01, Date: 20.03.2017” due on 05.05.2017 on the corner of the envelope along with the full address and contact details of the bidder.
4. The Final Prices quoted should be inclusive of all taxes or duties, packing, forwarding, freight, insurance, delivery and commissioning etc. at the destination site (NIT Sikkim, Ravangla, Sikkim). **Nothing extra shall be paid on any account. E Cess payable to Govt of Sikkim should be quoted in the Bid at the rate of 1% of the value. If e cess is not quoted separately, it shall be assumed that the price quoted includes E cess.**
5. The printed literature and catalogue/brochure giving full technical details should be included to verify the specifications quoted in the tender. The final amount should be in figures as well as in words. If there are overwriting, they should be duly initialled, failing which the bids are liable to be rejected. No alternate price will be entertained in the quotation.
6. All tender documents should have to be sent through courier, speed post or registered post only or may be dropped in the tender box at NIT Sikkim. Since, NIT Sikkim is located in a remote location, even through speed post it may take seven days. Therefore, bidders are suggested to send the quotation well in advance or by hand.
7. Quotation received after the closing date/time will not be considered.
8. The supplier/firm must be either original equipment manufacturer (OEM) or authorized dealer/sole distributor of quoted items. The certificate or equivalent document must be attached/communicated.
9. In the event of any dispute or difference(s) between the vender Institute (NIT Sikkim) and the vendor(s) arising out of non-supply of material or supplies not found according to specifications or any other cause whatsoever relating to the supply or purchase order before or after the supply has been executed, shall be referred to “The Director, NIT Sikkim”, who may decide the matter himself.
10. All tenders in which any of the prescribed conditions is not fulfilled or any condition is put forth by the tenderer shall be summarily rejected.
11. Successful bidder shall have to deposit a performance security of 10% for the period covered under warranty of the item(s). The Performance security can be in the form of a Commercial bank Guarantee or Retention money deducted from the gross payment to the supplier. If it is not submitted then 10% of the total payment will be kept for specified period.
12. The bid will be opened on **12th May, 2017**. The bidders or their authorized representative may also be present during the opening of the Technical Bid, if they desire so, at their own expenses.
13. **Clarifications:** Normally, pre-bid enquiries will not be entertained. However, in case the bidder requires any clarification regarding the tender documents, they are requested to contact

Mr. Pankaj Kesarwani, Assistant Professor, NIT Sikkim (e-mail: pankaj.keserwani@gmail.com, pankajkeserwani.cse@nitsikkim.ac.in) on or before **25.04.2017**.

14. Pre – Qualification Criteria:

- a. Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) on the same and specific to the tender should be enclosed.
- b. An undertaking from the OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend support for the warranty as well. In case of proprietary items, suitable declaration documents from the manufacturer to be submitted.
- c. Bidders must be a registered computer/electronics item supplier.

15. Evaluation: The bids for various items shall be evaluated individually and partial orders may be placed as per the discretion of the institute.

16. Validity: The bid should be valid for acceptance for a period of 60 Days. The Bidders should be ready to extend the validity, if required.

17. Delivery: The Equipment should be delivered and installed within the period as specified in the purchase order and be ready for use within 70 days of the issue of purchase order unless otherwise prescribed.

18. Liquidated Damage: If the bidder fails to deliver and place any or all the Equipment or perform the service by the specified date, penalty at the rate of 1% per week of the total order value subject to the maximum of 10% of total order value will be deducted.

19. Warranty: The period for which the warranty shall be in force should be mentioned by the bidder exclusively. Bidders must give the comprehensive onsite warranty as required from the date of successful installation of Equipment against any manufacturing defects and also give the warranty declaration that *“everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship and shall be of the highest quality and material of the type ordered, shall be in full conformity with the specification, as specified in the tender document.”*

Any deviation in the material, and the specifications from the accepted terms may liable to be rejected and the bidders need to supply all the goods in the specified form to the satisfaction / specifications specified in the order / contract and demonstrate at their own cost.

FIICTI

National Institute of Technology Sikkim
Ravangla Campus, Barfung Block,
South Sikkim 737139.

Annexure A**Technical specification for Desktop Set (CPU + Monitor + Keyboard + Mouse)**

Unit 1	Processor	Intel® 6th Generation Core i7 Quad Core CPU with minimum clock speed of 3.4 GHz, 8MB Cache or better
	Chipset	Intel® Q Series commercial chipset
	Motherboard	OEM Motherboard with OEM logo embossed on the motherboard
	Memory	8 GB DDR4 RAM expandable to 64GB; Four DIMM slots; Non-ECC dual-channel upto 2133 MT/s DDR4 SDRAM
	Hard Disk Drive	1TB HDD, 7200 RPM, SATA III 6 Gbps, SMART IV
	Optical Drive	SuperMulti DVD Writer
	Graphics	Integrated Graphics
	Audio	High Definition Integrated Audio with Internal Speaker
	Ethernet	Integrated Gigabit (10/100/1000 NIC) LAN
	Slots	Minimum 4 low profile PCI/PCIe Slots (3 x PCIex1 and 1 x PCIex16)
	Bays	Minimum 5 bays with atleast (2) 3.5" Drive bays & (1) ODD bay
	Ports	Front I/O (2) USB 2.0 ports, (2) USB 3.0 Ports 3.5mm headphone output and microphone jack Rear I/O (2) USB 2.0 ports, (4) USB 3.0 Ports (1) VGA video port; (2) DisplayPort/DVI-D Port (1) RJ-45 network connector (1) RS-232 serial port 3.5mm audio in/out jacks (2) PS/2 keyboard and mouse ports
	Operating System	Ubuntu/Linux/Windows/Free DOS
	Diagnostic Tool	Inbuilt Pre-Boot BIOS Diagnostics
	Security	TPM 1.2 Security Chip; SATA port disablement (via BIOS); USB enable/disable (via BIOS); Optional USB Port Disable at factory (user configurable via BIOS); Removable media write/boot control; Power-On password (via BIOS); Administrator password (via BIOS); Setup password (via BIOS)
	System Weight / Volume	Weight should be no more than 8 KG and volume no more than 13L
Information Accessibility	Product details, specifications and brochure to be available in public domain	
Support	Drivers should be available for download from OEM site for at least 3 years from the date of purchase order	
Market Credibility	The OEM vendor should be of positive net worth for the last three years	
Warranty	3 Years Comprehensive Warranty for Parts, Labour and On-site service (3-3-3)	
Unit 2	Keyboard & Mouse	PS/2 104 keys keyboard (Same make as PC) PS/2 2 Button Scroll Mouse (Same make as PC)
Unit 3	Monitor	19.5" or higher IPS Panel LED backlit with TCO 7.0

Annexure B

Technical specification of 40 KVA Online UPS system

1. SYSTEM RATINGS AND OPERATING CHARACTERISTICS

- a) The rating of UPS should be 40 KVA.
- b) UPS should be online-Double Conversion with Digital Signal Processor control.
- c) Should have IGBT based PFC Rectifier and IGBT based Inverter
- d) SMF Batteries should be sized for back-up of one hour at full load
- e) Battery manufacturer's catalogue and stacking details to be provided.
- f) Battery banks and their mounting racks should be separate for each UPS.

2. SYSTEM INPUT

- a) Input Voltage Rating: Nominal 415 V
- b) Input Voltage Range: 228 to 476 V. In this range UPS should not switch to Battery backup mode.
- c) Input frequency Range: 40 - 60 Hz. In this range UPS should not switch to Battery backup mode.
- d) Input power factor: > 0.98 at 100% load.

3. SYSTEM OUTPUT

- a) **Output Voltage Rating:** 3 ph 415 V
- b) **Output Frequency Regulation:** 50 Hz +/- 0.1 Hz
- c) **Overload capability:** 125-150% for 45-60 seconds in normal operation

4. UPS DESIGN AND FABRICATION

- a) **Enclosure:** The UPS shall be housed in a free standing enclosure.
- b) **Battery housing:** Battery housing cabinet to be supplied.
- c) Battery bank for 45-60 Min back up along with interconnecting cables, cable from UPS to Battery Bank through battery circuit breaker and MS open rack with TWO years maintenance.
- d) **Inverter/Battery charger:** The inverters shall be a high-speed insulated gate-bipolar transistor switch module type (IGBT) and shall be controlled to precisely regulate system output voltage and battery charge current. The inverters shall be temperature protected. In case of inverter over temperature, the unit shall activate an alarm and automatically transfer to static bypass operation.

5. The UPS must be installed and commissioned at **The NIT Sikkim, Ravngla Campus**. The required inverter input and output switchgear & cables should be provided.

6. WARRANTY

- a) **UPS Module:** The UPS manufacturer shall warrant the UPS module against poor workmanship and materials for 2 years from the date of supply. The warranty shall include coverage of all internal parts and the supporting equipment.
- b) **External Batteries:** For batteries connected to the UPS, the warranty should be at least ≥ 02 Years from the date of supply, installation and acceptance.

Annexure C

LAN Setup

1. Wired LAN connection for 80-100 desktops as well as Wi-Fi connection is required.
2. All the Access Points should be compatible with the NIT Sikkim existing setup.
3. Digging, Cutting, Filling, Laying (including PVC conduit / HDPE pipe/ GI Pipe wherever required), Fixing and installation of the entire equipment will be the responsibility of the successful bidder.
4. Active components (Wireless Controller, AP's) and Switch and SFP modules proposed by the bidder should be compatible with existing setup of NIT Sikkim.

SL-1: Wireless Indoor Access Point (Qty-2 nos)			
S/N	Specification / Requirement	Compliance (Yes/No)	Deviation (If Any)
1	The APs should support the 802.11a, 802.11b, 802.11g and 11n and ac standards. It should also support 802.11ac standard in the 5 GHz band.		
2	Simultaneous client support on dual band radio is expected.		
3	Shall provide Min 22 dBm Radio output power for both Radio's.		
4	The access point is expected to detect clients that have dual band capability and automatically steer those client to use the 5GHz band instead of the 2.4GHz band.		
5	The antennas to be dual polarised and should be integrated inside the access point enclosure to minimize damage and create a low profile unit that does not stand out visually.		
6	The access point should have minimum 1 Gigabit Ethernet port.		
7	The access point should support 802.1q VLAN tagging		
8	The access point should support WPA2 enterprise authentication and AES/CCMP encryption. AP should support Authentication via 802.1X and Active Directory.		
9	Implement Wi-Fi alliance standards WMM, 802.11d, 802.11h and 802.11e		
10	The Access Point should provide for concurrent support for high definition IP Video, Voice and Data application without needing any configuration. This feature should be demonstrable.		
11	Support RF auto-channel selection by the following three methods: a) measuring energy levels on the channel; b) monitoring for 802.11 signal structures and; (c) detecting radar pulses. Other similar forms of smart selection shall also be accepted.		
12	Channel selection based on measuring throughput capacity in real time and switching to another channel should the capacity fall below the statistical average of all channels without using background scanning as a method.		
13	Should support up to 200 clients per AP is expected		
14	Should support DHCP Option 82 in standalone mode (without Controller) as well as in Managed mode (with Controller)		
15	For troubleshooting purposes, the administrator should have the ability to remotely capture 802.11 and / or 802.3 frames from an access point without disrupting client access.		
SL-2: L2 Switch (Qty-5 nos)			
S/N	Specification / Requirement	Compliance (Yes/No)	Deviation (If Any)
1	L2 Managed Switch having 24x10/100/1000BaseT ports and 4xSFP slots		
2	Switching Capacity should be at least 56Gbps		

3	Packet Forwarding Rate should be at least 41.7Mpps for 64-byte packet size		
4	The switch should have non-blocking architecture & wire-speed performance under fully loaded condition from day-1		
5	It should have hardware reset button & fan-less design.		
6	The Switch should have following L2 features from Day-1		
7	MAC Address Table size: At-least 16000, support at least 256 static MAC		
8	Flow Control: IEEE 802.3x in full duplex, back pressure in half duplex & HoL blocking prevention		
9	IGMP v1 v2 with at least 256 IGMP snooping groups, Per VLAN IGMP Snooping, port based IGMP snooping fast leave.		
10	LLDP, LLDP-MED, IPv6 Neighbor Discovery, L2 multicast filtering,		
11	IEEE802.1D STP, 802.1w RSTP, Root guard or equivalent feature.		
12	The switch should be able to avoid the loop occurring in a single port connected to an unmanaged switch/hub by shutting down the corresponding port or corresponding VLAN		
13	IEEE 802.3ad Link Aggregation with at least 8 ports per groups & 14 groups per switch.		
14	Port mirroring for Tx/Rx/Both. One-to-One mode, Many-to-one mode		
15	IEEE 802.1Q VLAN, at least 256 Static VLANs, Voice-VLAN, asymmetric VLAN, auto surveillance VLAN		
16	The switch should have 802.1p support with 4 queues per port. Support strict & WRR queue handling technique.		
17	The switch should have Port-based ingress & egress bandwidth control with minimum granularity of at least 64kbps		
18	The switch is expected to have standard & extended Access control list		
19	The switch should have the following security features from Day-1: SSLv3, Broadcast/Multicast & Unicast storm control, port security feature with at least 64 MAC per port, traffic segmentation, ARP spoofing prevention, IEEE 802.1x, DHCP server screening, RADIUS server, Binding of IP address with MAC address & interface.		
20	The switch should have feature to protect the CPU from protocol control packet attack.		
21	The switch should have cable diagnostic feature to check the status of connected RJ45 cables.		
SL-3: Other accessories			
Other accessories (e.g RJ 45 cable, etc) are as per the requirement.			